

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/03/00

Date Received: 12/17/99

Project: Metro Self Monitor, PO# M63209

Date Extracted: 12/22/99

Date Analyzed: 12/23/99

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE  
FOR CHROMIUM, COPPER, NICKEL, ZINC  
USING METHOD 6010**

**Samples Processed Using Method 3005A**

Results Reported as mg/L (ppm)

<u>Sample ID</u>	<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M63209	0.59	0.72	0.59	0.10
Method Blank	<0.05	<0.05	<0.05	<0.05

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

Date of Report: 01/03/00

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Project: Metro Self Monitor, PO# M63209

**QUALITY ASSURANCE RESULTS  
FOR TOTAL METALS BY  
INDUCTIVELY COUPLED PLASMA (ICP)  
(METHOD 6010)**

Laboratory Code: 912076-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	mg/L (ppm)	0.59	0.55	7	0-20
Copper	mg/L (ppm)	0.72	0.74	3	0-20
Nickel	mg/L (ppm)	0.59	0.54	9	0-20
Zinc	mg/L (ppm)	0.10	0.10	0	0-20

Laboratory Code: 912076-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	% Recovery MS	% Recovery MSD	Acceptance Criteria	RPD
Chromium	mg/L (ppm)	5	0.59	91	96	80-120	5
Copper	mg/L (ppm)	5	0.72	95	96	80-120	1
Nickel	mg/L (ppm)	10	0.59	87	96	80-120	10
Zinc	mg/L (ppm)	5	0.10	88	98	80-120	11

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery LCSD	Acceptance Criteria	RPD
Chromium	mg/L (ppm)	5	92	94	80-120	2
Copper	mg/L (ppm)	5	100	104	80-120	4
Nickel	mg/L (ppm)	10	88	91	80-120	3
Zinc	mg/L (ppm)	5	85	87	80-120	2


FRIEDMAN & BRUYA, INC.  
3012 16th Avenue West  
Seattle, WA 98119-2029  
(206) 285-8282

DT 12/17/99 AI1

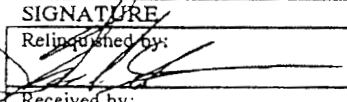
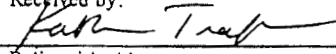
### SAMPLE CHAIN OF CUSTODY

912076

Send Report To: Alaskan Copper Works Contact: Gerald A. Thompson  
Company: Alaskan Copper Works  
Address: 628 Harvard St  
City, State, Zip: Seattle WA 98174  
Phone #: 206-382-8879 FAX #: 206-382-4809 Date: 12/16/99

SITE NO.	PROJECT NAME	PURCHASE ORDER #
7238	metro self monitor	M63209
SAMPLERS (signature)		PROJECT LOCATION
		3200 6th Ave S.
REMARKS		SAMPLE DISPOSAL INFORMATION
		<input type="checkbox"/> Dispose after 30 days <input checked="" type="checkbox"/> Return Samples <input type="checkbox"/> Call for Instructions

Sample #	Date/Time Sampled	Type of Sample	# of Jars	Lab Sample #	Analyses Requested
M63209	12/14/99 12:30	H2O	1	01	CR Cu Ni Zn

SIGNATURE	PRINT NAME	COMPANY	Date	Time
Relinquished by: 	Gerald A. Thompson	ACW	12/16/99	1:00
Received by: 	Kate Trafton	FB Inc.	12/17/99	7:20A
Relinquished by:				
Received by:				

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D.  
Charlene Jensen, M.S.  
Bradley T. Benson, B.S.  
Kurt Johnson, B.S.

3012 16th Avenue West  
Seattle, WA 98119-2029  
TEL: (206) 285-8282  
FAX: (206) 283-5044  
e-mail: fbi@isomedia.com

January 3, 2000

**DUPLICATE COPY**

**INVOICE #00ACU0103-1**

Accounts Payable  
Alaskan Copper Works  
628 South Hanford St.  
Seattle, WA 98134

RE: Project Metro Self Monitor Grab-PO# M63209: Results of testing  
requested by Gerry Thompson for material submitted on December 17, 1999.

1 water sample analyzed for  
Chromium, Copper, Nickel, and Zinc  
using Method 6010 @ \$80 per sample

\$ 80.00

Amount Due .....

\$ 80.00

PLEASE NOTE: As a convenience for our valued clients, we can accept credit cards (VISA, MasterCard or government purchasing cards) for payment on our invoices. Please contact our office if you would like to take advantage of this service.

FEDERAL TAX ID #(b) (6)

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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3012 16th Avenue West  
Seattle, WA 98119-2029  
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e-mail: fbi@isomedia.com

January 3, 2000

Gerry Thompson, Project Manager  
Alaskan Copper Works  
628 South Hanford St.  
Seattle, WA 98134

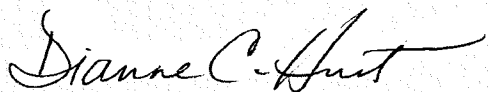
Dear Mr. Thompson:

Included are the results from the testing of material submitted on December 17, 1999 from your Metro Self Monitor, PO# M63209 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Dianne C. Hurt  
Project Manager

Enclosures  
ACU0103R.DOC